

T Plant & Interim Sludge Storage

Fact Sheet – September 2022



The U.S. Department of Energy and contractor Central Plateau Cleanup Company are safely and compliantly maintaining the T Plant facility while monitoring the interim storage of sludge.

Background

Completed on Oct. 8, 1944, T Plant is the oldest remaining nuclear facility in the country still operating with a current mission. This historic mission once supported plutonium production for the national defense during World War II and the Cold War.

T Plant was used to expose irradiated fuel rods from Hanford's B Reactor to a series of chemical processes. The chemicals were needed to dissolve the fuel rods themselves, allowing workers to access and then extract the tiny amount of plutonium produced when the rods underwent nuclear chain reactions in the reactors.

Plutonium processed at T Plant – one of Hanford's five processing facilities – was used in the testing of the world's first atomic bomb in July 1945. Called the Trinity Test, the bomb was detonated in the New Mexico desert. Less than a month later, on August 9, the "Fat Man" bomb, with plutonium from Hanford, was dropped over Nagasaki, Japan, effectively ending World War II.

Mission

Today, the facility supports waste management as part of the Hanford Site's cleanup effort. T Plant is providing safe and compliant temporary storage for highly radioactive sludge and contaminated filter media received from the K West Reactor spent fuel storage basin.

Moving the sludge 12 miles away from the K West Basin to T Plant significantly reduces risk to the Columbia River.

Future

Workers will continue to inspect and monitor the 20 engineered sludge containers on an annual basis to ensure they remain in a safe configuration.



T Plant is located in the 200 West Area of the Hanford Site.





To prepare for receipt and storage of sludge containers, crews cleaned out large areas of the T Plant canyon (top), modified the cells beneath to accept the containers and performed extensive testing and training (above).



For more information: www.hanford.gov cpcco.hanford.gov



